#### FILED VIA FACSIMILE

PATENT APPLICATION
Docket No: 15689.61

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		}
	Yukihiko OKUMURA et al.	{
Serial No.:	09/701,705	) Art Unit ) 2661
Filing Date:	December 1, 2000	}
For:	CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD	\ \ \ \
Confirmation No.:	7195	<b>)</b>
Examiner:	Qutbuddin Ghulamali	)
Customer No.:	022913	3 %

#### CERTIFICATE OF FACSIMILE TRANSMISSION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office from (801) 328-1707 to facsimile number (571) 273-8300 on the date shown below.

- Transmittal For Revocation And Substitute Power Of Attorney And Change of Attorney Docket Number (2 pages)
- Revocation and Substitute Power of Attorney documents originally filed October 25, 2002
- Facsimile Coversheet (1 page)

Dated this 19th of December, 2005.

Respectfully submitted,

ADRIAN J. LEE

Registration No. 42,785

Attorney for Applicant

Customer No. 022913

DS0000004541V001

) Art Unit

DEC 19 2005

## WORKMAN | NYDEGGER

INTELLECTUAL PROPERTY ATTORNEYS

1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY, UTAH 84111
TELEPHONE: (801) 533-9800
FAX: (801) 328-1707

WEBSITE: HTTP://www.WNLAW.COM

VIA FACSIMILE (571) 273-2885

PATENT APPLICATION
Docket No: 15689.61

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



RICK D. NYDEGGER

BRENT P. LORIMER

LARRY R. LAYCOCK

JOHN C. STRINGHAM JOHN M. GUYNN CHARLES L. ROBERTS DANA L. TANGREN ERIC L. MASCHOPF CHARLES J. VEVERKA

ROBYN L. PHILLIPS RICHARD C. GILMORE \*

L. DAVID GRIPPIN ADRIAN J. LEE FRASER D. ROY CARL T. REED

STERLING A. BRENNAN R. BURNY ISRAELSEN DAVID R. TODD DAVID B. DELLENBACH

THOMAS R. VUIGINICK

JONATHAN W. RICHARDS DAVID R. WRIGHT

R. Parrish Freeman, Jr. PRTER F. MALEN, JAL L. REX SEARS, PH.D. WILLIAM R. RICHTER ROBERT E. AYCOCK JENS C. JENKINS MICHAEL B. DOOD KEVIN W. STINGER WILLIAM J. ATHAY RYAN D. BENSON SARA D. TONES TIGE KELLER JANNA L. JENSEN MATTHEW D. TOOD J. LAVAR OLDHAM MICHAEL J. FRODSHAM BRETT A. HANSEN BRETT I. JOHNSON MATTHEW A. BARLOW Wesley C. ROSANDER ANDREW 5. HANSEN CHAD E. NYDECCER JOSEPH G. PIA CLINTON E. DUKE RYAN N. PARR JAMES B. BELSHE Kirk R. Harris MECHARL M. BALLARD DAVID A. JONES SHANE K. JENSEN JONATHAN M. BENNS, PH.D. Scorr A. Woodbruky JOHN T. GADD MARK W. FORD AARON M. SMITH

VERNON R. RICE 9

In re application of	
	Yukihiko OKUMURA et al.
Serial No.:	09/701,705
Filing Date:	December 1, 2000
For:	CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD
Confirmation No.:	7195
Examiner:	Qutbuddin Ghulamali
Customer No.:	022913

# TRANSMITTAL for REVOCATION AND SUBSTITUTE POWER OF ATTORNEY AND CHANGE OF ATTORNEY DOCKET NUMBER

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Transmitted herewith is a copy of the Revocation and Substitute Power of Attorney and Change of Attorney Docket Number that we originally filed on October 25, 2002 for entry in the above-identified application. We notice after conducting a recent audit of cases being handled by our law firm using the Patent Application Information Retrieval (PAIR) that the prior law firm of Brown, Raysman, Millstein, Felder & Steiner was still listed as the firm handling this case. Please update your records to show that our firm of Workman Nydegger is the current firm handling the above-identified application.

<sup>\*</sup> Advanced only in California

<sup>§</sup> Adrelend only in Virginia

Dated this 19th day of December, 2005.

Respectfully submitted,

ADRIAN J. LEE Attorney for Applicant Registration No. 42,785 Customer No. 022913

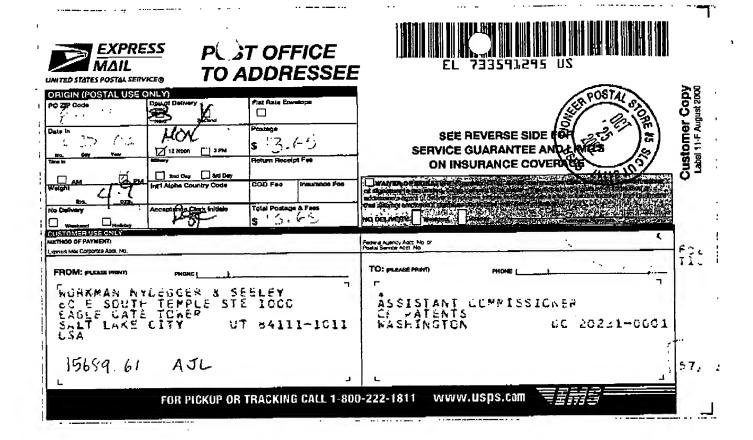
AJL:ds DS0000004497V001

# BEST AVAILABLE COPY

12/19/2005 15:49 FAX 8013281707

WORKMAN NYDEGGER

Ø1006/019





TO THE UP AD STATES PATENT AND TRADEMARK OFFICE PLEASE STAMP AND RETURN. THANK YOU.

Transmittal for Revocation and Substitute Power of Automey and Change of Attorney Docket Number (2 pgs. in triplicate); Revocation and Substitute Power of Attorney and Exhibit A (8 pgs); Change of Attorney Docket No. (2 pgs); postcard; and Certificate of Express Mailing Label No. EL 733 591 295 US

Applicant(s):

Yukihiko Okumura et al.

For:

CHANNEL ESTIMATION DEVICE AND

\_ 2002

METHOD, DEMODULATION DEVICE AN METHOD, AND FADING FREQUENCY

DECISION DEVICE AND METRIOD

Serial No.:

09/701,705

Filed:

December 1, 2000

Confirmation No.:

7195

Date of Mailing:

OCT 25

Docket:

15689.61



#### DEC 19 2005



A PACIFICIONAL CORPORATION 1000 EAGLE GATE TOWER 60 EAST SOUTH TEMPLE SALT LAKE CXTY, UTAH 84111 TELEPHONE (801) 533-9600 FACSIMILE (801) 328-1707 RICK D. NYDEGGER DAVID O. SEELEY BRENT P. LORMER THOMAS R. VUKSINICK LARRY R. LAYCOCK JONATHAN W. PICHARDS DAVID A WARGHT JOHN C. STRINGHAM JOHN M. GUYNN CHARLES L. ROBERTS GREGORY ML TAYLOR DANA L. TANGREN ERIC L. MASCHOFF CHARLES J. VEVERKA ACEYN L PHILLIPS RICHARD C. GLUMORET DAVID B. DELLENBACH AL BURNS ISPAELSEN DAVID FL TODD L DAVID GIFFFFIN

JESÜS JUANÓS I TIMONEDA, PAD. ADRIAN J. LEE FRASER D. ROY CAPIL T, REED R. PARRICH FREEMAN, JR. PETER F. MALEN, JR. L. REX SEARS, Ph.D. ERIC M. KAMERATH ROBERT E. AYCOCK JENS C. JENKINS KEVIN W. STINGER WILLIAM J. ATHAY MICHAEL B. DODO WILLIAM R. RICHTER TRENT H. BAKER RYAN D. BENSON BARA D. JONES TIGE KELLEA

TADMITTED ONLY IN CALIFORNIA

PATENTS TRADEMARKS COPYRIGHTS TRADE SECRETS UNFAIR COMPETITION LICENSING COMPLEX LITIGATION MALLING ADDRESS P.O. BOX 46962

SALT LAKE CITY, UT 84145

INTERNET

HOME PAGE: http://www.wn.spatenk.com GENERAL E-MAIL: Info@wnspettent.com

EXPRESS MAILING LABEL NO. EL 733 591 295 US

PATENT APPLICATION Docket No: 15689.61

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of		}	
	Yukihiko OKUMURA et al.	{	
Serial No.:	09/701,705	) Art Unit ) 2661	
Filing Date:	December 1, 2000	} 2001	
Confirmation No.:	7195	{	
For:	CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD	}	

#### TRANSMITTAL FOR REVOCATION AND SUBSTITUTE POWER OF ATTORNEY and CHANGE OF ATTORNEY DOCKET NUMBER

Assistant Commissioner for Patents Washington, DC 20231

Sir:

Transmitted herewith for filing is a Revocation and Substitute Power of Attorney and Change of Attorney Docket Number. Please address all future correspondence in connection with the above-identified patent application to the attention of the undersigned. Triplicate copies of this letter are enclosed.

Dated this 2544 day of October , 2002.

Respectfully submitted,

ADRIAN J. LEE Attorney for Applicant Registration No. 42,785

PATENT TRADEMARK OFFICE

RECEIVED
CENTRAL FAX CENTER

DEC 1 9 2005

EXPRESS MAILING LABEL NO. EL 733 591 295 US

PATENT APPLICATION Docket No: 15689.61

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Yukihiko OKUMURA et al.

Serial No.:

09/701,705

Art Unit
2661

Filing Date: December 1, 2000

Confirmation No.: 7195

For: Channel Estimation Device and Method,
Demodulation Device and Method, and Fading

Frequency Decision Device and Method

#### REVOCATION AND SUBSTITUTE POWER OF ATTORNEY

Honorable Commissioner of Patents and Trademarks Washington, DC 20231

Sir:

The undersigned, Yoshitaro Shimanuki, declares: that he is the Intellectual Property Executive Manager of NTT DoCoMo, Inc., and that he is authorized to execute this Revocation and Substitute Power of Attorney on behalf of NTT DoCoMo, Inc.; and that NTT DoCoMo, Inc. is the assignee of the entire interest of the above-identified application, as shown by the assignments recorded in the United States Patent Office at Reel 011499, Frame 0223, a copy of said assignment is attached at Exhibit A hereto; and that the attached assignment has been reviewed by him, and to the best of his knowledge and belief title is in the assignee NTT DoCoMo, Inc., hereby revokes all previous powers of attorney in the above-identified application, and now hereby appoints all attorneys under customer number:

1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 1991 | 19

PATENT TRADEMARK OFFICE

of WORKMAN, NYDEGGER & SEELEY, 1000 Eagle Gate Tower, 60 East South Temple, Salt Lake City, Utah 84111, as attorneys with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the Letters Patent, and to transact all business in the Patent and Trademark Office connected therewith. The declarant further declares that all statements made herein of his own knowledge are true; and further that these statements were made with the knowledge that willful, false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful, false statements may jeopardize the validity of the application or any patent issuing thereon. All correspondence and telephonic communications should be directed to:

ADRIAN J. LEE WORKMAN, NYDEGGER & SEELEY 1000 Eagle Gate Tower 60 East South Temple Salt Lake City, Utah 84111

All previous powers of attorney are hereby revoked.

Signed this 30 day of September, 2002.

Yoshitaro Shimanuki

Intellectual Property Executive Manager

Yoshitaro Shimanubi

NTT DoCoMo, Inc.

11-1, Nagatacho 2-Chome

Chiyoda-Ku

Tokyo 100-6150, Japan

W:\15689\61\RE0000000246V001.doc



Patent and Trademark Office

Patent and Trademark Office

OF PATENTS AND TRADEMARKS

Weshington, D.C. 20231

2016/1-7

APRIL 23, 2001

**PTAS** 

BROWN RAYSMAN MILLSTEIN FELDER & STEINER MATTHEW J. MARQUARDT 120 WEST 45TH STREET NEW YORK, NY 10036



# UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 12/01/2000

REEL/FRAME: 011499/0223

NUMBER OF PAGES: 3

BRIEF; ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

OKUMURA, YUKIHIKO

DOC DATE: 11/22/2000

ASSIGNOR:

ANDO, HIDEHIRO

DOC DATE: 11/22/2000

ASSIGNOR:

USUDA, MASAFUMI

DOC DATE: 11/22/2000

ASSIGNOR:

ISHIKAWA, YOSHIHIRO

DOC DATE: 11/22/2000

ASSIGNOR:

ONOE, SEIZO

DOC DATE: 11/22/2000

ASSIGNEE:

NTT DOCOMO, INC.

11-1, NAGATACHO 2-CHOME

CHIYODA-KU, TOKYO 100-6150, JAPAN

REGORDS UPDATED

()

011499/0223 PAGE 2

SERIAL NUMBER: 09701705 PATENT NUMBER:

FILING DATE: 12/01/2000 ISSUE DATE:

JEFFREY OLSEN, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

#### ASSIGNMENT

WHEREAS, we, Yukihiko OKUMURA, a citizen of Japan, residing at 9-2-3-405, Sugita, Isogo-ku, Yokohama-shi, Kanagawa 235-0033, Japan; Hidehiro ANDO, a citizen of Japan, residing at 3-16-5-101, Serigaya, Konan-ku, Yokohama-shi, Kanagawa 233-0006, Japan; Masafumi USUDA, a citizen of Japan, residing at 18-11-102, Noukendaidori, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0053, Japan; Yoshihiro ISHIKAWA, a citizen of Japan, residing at 4-18-4-503, Nobi, Yokosuka-shi, Kanagawa 239-0841, Japan and Seizo ONOE, a citizen of Japan, residing at 1974-21, Mutsuura-cho, Kanazawa-ku, Yokohama-shi, Kanagawa 236-0032, Japan have invented one or more inventions disclosed in an application for Letters Patent of the United States titled

CHANNEL ESTIMATION DEVICE AND METHOD, DEMODULATION DEVICE AND METHOD, AND FADING FREQUENCY DECISION DEVICE AND METHOD

(hereinafter referred to as "said application"), said application having been filed herewith.

WHEREAS, NTT DoCoMo, Inc., (hereinafter referred to as "the Assignee"), a Japanese corporation, having a place of business at 11-1, Nagatacho 2-chome, Chiyodaku, Tokyo 100-6150, Japan; is desirous of obtaining all right, title and interest in, to and under said invention(s) and said application; and

NOW, THEREFORE, for good and valuable considerations, the receipt and sufficiency of which we hereby acknowledge, we have sold, assigned, transferred and set over, and by these presents hereby sell, assign, transfer and set over to the Assignee all right, title and interest in, to and under said invention(s) and said application, including the right to apply for any Letters Patent of the United States of America and in any and all foreign countries on said invention(s), and any and all other applications for Letters Patent on said invention(s), in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part and convention applications based in whole or in part upon said invention(s) or upon said application, and any and all Letters Patent which may issue thereon. We hereby covenant and agree that we will, upon request of the Assignee, communicate to the Assignee any facts known to us relating to said invention(s) and the history thereof, testify in any legal proceeding, execute all lawful papers including without limitation all divisional, continuing and reissue applications and all rightful oaths and declarations, and generally do all further acts which may be deemed necessary by the Assignee to obtain and enforce proper patent protection for said invention(s) in all countries.

IN TESTIMONY WHEREOF, we have executed this document on the date indicated below.

09/701705 528 Rec'd PCT/PTO 01 DEC 2000

November 22, 2000 (Signature) Yukihiko OKUMURA Date: November 22, 2000 November 22, 2000 Date: (Signature) Masafumi USUDA (Signature) Yoshihiro ISHIKAWA Date: November 22, 2000 (Signature) Seizo ONOE

12/05/2000 05 FC:581

(1)02-12-2001 (1) (1)09/701705 (1)09/70170 (1)0000 (1)000 (1)000 (1)000 (1)000 (1)000 (1)000 (1)000 (1)000 (1)000

	Allumey Cocket No. 3613/107			
101611357	RM COVER			
PAIEN	115 UNLY			
To the Honorable Commissioner of Palents and Trademarks	s. Please record the attached original documents of copy thereof.			
Name of conveying party(les):	Name and address of receiving party(les);			
Yukihiko OKUMURA, Hidehiro ANDO, Masafumi	Name: NTT DOCOMO, INC.			
USUDA, Yoshihiro ISHIKAWA and Seizo ONOE	Internal Address: 11-1, Nagatacho 2-chome, Chiyoda-ku, Tokyo 100-6150, Japan			
Additional name(s) of conveying party(jes) attached? Yes X I	No			
3. Nature of conveyance:				
	Street Address: State: ZIP:			
Security Agreement Change of Name	5.00			
☐ Other	Additional name(s) & address(es) attached?			
Execution Date: November 22, 2000				
Application number(s) or patent number(s)	09/701705			
If this document is being filed together with a new applica	tion, the execution date of the application is:			
A. Patent Application No.(s)	B. Patent No.(s)			
Additional numbers a	uttached? ☐ Yes ☒ No			
5. Name and address of party to whom	6. Total number of applications and patents			
correspondence concerning document should be mailed:	involved: 1			
BROWN RAYSMAN MILLSTEIN FELDER & STEINER LLP	7. Total fee (37 CFR 3.41): \$ 40.00			
120 West 45th Street	☐ Check enclosed ☐ Authorized to be charged to deposit account			
New York, New York 10036				
(212) 944-1515	B. Deposit account number: 02-4270     (Attach duplicate copy of this page by deposit account)			
RINANDO 00000102 024270 09701705	Please charge any additional fees required, or credit any			
40.00 CH	overpayment, to the above deposit account			
DO NOT US	E THIS SPACE			
9. Statement and signature.				
To the best of my knowledge and belief, the foregoing	ng information is true and correct and any attached copy			
is a true copy of the original document.	/ / _			
Matthew J. Marquardt MAT	1 DESCUROL ZW			
9 0	ignature Date			
, ,	r sheet, attachments and document: 3_ h required cover sheet information to:			
Commissioner of Patents and Trademarks  Box Assimments				
. Box Assignments				

Washington, D.C. 20231